

REMARKS

In accordance with the foregoing, claims 1, 6, 9, and 12 have been amended, and claims 18 and 19 have been added. Claims 1-3, 6, 9, 12-15, and 18-19 are pending and under consideration.

REQUEST FOR RESPONSE TO APPLICANTS PREVIOUS ARGUMENTS

In the Amendment filed July 7, 2009, Applicants set forth remarks on pages 10-11 regarding deficiencies in the cited reference Andrew. However, in the outstanding Office Action these remarks have not been responded to.

As noted in at least MPEP §707.07(f), the Examiner is required to answer and address all traversals. This requirement is in addition to any repetition of a previously held position and is required to allow the applicant a chance to review the Examiner's position as to these arguments and to clarify the record for appeal.

Additionally and as further noted in MPEP §707.07(f), a failure of the Examiner to address the Applicants' traversals can be deemed a failure to rebut these arguments so as to admit that the arguments have overcome the rejection. At the very least, the failure to address the applicant's traversals would render the Examiner's decision to again reject the claims arbitrary and capricious and invalid under the Administrative Procedures Act, 5 U.S.C. § 706, the standard under which such rejections are reviewed in view of *Dickinson v. Zurko*, 527 U.S. 150, 50 USPQ2d 1930 (1999).

As such, since the Examiner has not addressed the Applicants' traversals presented in the Amendment of July 7, 2009, it is respectfully requested that the Examiner withdraw the Final Office Action and issue a new Office Action addressing the remarks filed July 7, 2009.

REJECTION UNDER 35 U.S.C § 102

Claims 6 and 9 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Park, U.S. Patent No. 6,438,525. This rejection is respectfully traversed.

By way of review, Park is directed towards a scalable audio encoding/decoding apparatus for coding audio signals into a layered datastream having a base layer and enhancement layers. Park discusses in col. 13, lines 18-20 that the quantized values of the audio signal are decoded sequentially from the MSB's (most significant bits) to the LSB's (least significant bits), and from low frequency components to high frequency components, as in the coding process. Park discusses the coding process in col. 8, lines 2-11, that all of the MSBs of all of the frequency components are sequentially processed, and that if the coding of the MSBs

is completed, than the next upper significant bit values are obtained to then be sequentially coded.

In contrast, claim 6 at least recites:

Huffman-decoding the audio data in groups of K quantized samples, each group including K-bit sized symbols in order from a symbol formed with MSB bits down to a symbol formed with LSB bits and obtaining quantized samples by referring to the coding model information

Therefore, claim 6 requires that the audio data is decoded in groups of K quantized samples, where each group includes K-bit sized symbols in order from a symbol formed with MSB bits down to a symbol formed with LSB bits. Accordingly, claim 6 requires that only one symbol per bit significance is generated for a group of quantized samples, and that the bit size of the symbol is the same as the number of quantized samples.

In contrast, the cited passage, col. 7, lines 43-48 of Park states that “first, the MSBs of the respective frequency components are obtained, and then the next upper significant bits are coded sequentially by one bit, up to the LSB’s. In such a manner, more important information is coded first so that bitstreams are generated from the forehand.” (Emphasis added).

Further, col. 8, lines 5-9 of Park give an example of the coding process in Park stating: “For example, in the case of coding in units of 4 bits, 1010 [the first four MSB bits given in the 8 quantized values in col. 7, lines 51-65] is coded, then 0000 is coded. If the coding of the MSBs is completed, the next upper significant bit values are obtained to then be coded in the order of 0001, 0010, ... , up to the LSBs.” (Emphasis added).

Therefore, Park has not been shown to discuss or suggest the claimed “Huffman-decoding the audio data in groups of K quantized samples, each group including K-bit sized symbols in order from a symbol formed with MSB bits down to a symbol formed with LSB bits and obtaining quantized samples by referring to the coding model information.” Rather, Park discusses using units of 4 bits, wherein the number of quantized values in Park are 8, and that all of the MSB’s are processed sequentially before processing the next upper significant bit values.

Further, claim 6 at least recites “decoding audio data in units of symbols in consideration of a bit range allowed in each of the plurality of layers.” That is, claim 6 requires that the decoding of audio data in units of symbols is done in consideration of a bit range allowed.

In the Response to Arguments section, the Office Action cites to col. 4, lines 33-35, and col. 9, lines 4-59, as setting forth that Park discusses that quantized bit values are “packed” in a

way to fit within the bit rate for a layer. However, in the passages cited in the Response to Arguments, Park has not been shown to discuss or suggest that the “decoding audio data in units of symbols,” is performed “in consideration of a bit range allowed in each of the plurality of layers,” at least because in the cited passages, Park does not appear to be discussing “symbols,” as claimed.

In col. 7, line 49 – col. 8, line 11, Park discusses coding in units of 4 bits, which the Office Action appears to be interpreting as being equal to the claimed “symbols.” However, here, Park appears to discuss that the coding is in units of 4 bits, and that all of the MSB bits are processed sequentially, and then once the coding of the MSB is completed, the next upper significant bit values are obtained. However, whether this coding in units of 4 bits, in Park is performed “in consideration of a bit range allowed in each of the plurality of layers,” does not appear to be discussed.

Rather, Park states in col. 9, lines 22-24, that “if quantization bits of a certain band are less than those of the band being currently coded, coding is not performed.” Therefore, Park appears to discuss that a certain band may not be coded, but Park has not been shown that “decoding audio data in units of symbols” is “in consideration of a bit range allowed in each of the plurality of layers corresponding to the audio data,” as claimed.

In cited col. 9, line 59, Park states that “data is coded from the MSB of the binary data to form bitstreams within the bit quantity allowance.” Therefore, Park appears to set forth that overall, bitstreams are formed to be within the bit quantity allowance. However, specifically, here, Park has not been shown to discuss or suggest “decoding audio data in units of symbols in consideration of a bit range allowed,” as claimed.

Therefore, Applicants respectfully submit that Park fails to discuss or suggest the claimed “decoding audio data in units of symbols in consideration of a bit range allowed in each of the plurality of layers corresponding to the audio data, in order from a symbol formed with MSB bits down to a symbol formed with LSB bits.”

Accordingly, Applicants respectfully submit that Park has not been shown to discuss or suggest the features of claim 6, and therefore, that claim 6 patentably distinguishes over the cited art.

Claim 9 at least recites features similar to claim 6 in differing scope and breadth. Therefore, for at least the reasons set forth above regarding claim 6, Applicants submit that claim 9 patentably distinguishes over the cited art.

Withdrawal of this rejection and allowance of all pending claims is respectfully requested.

REJECTION UNDER 35 U.S.C. § 103

Claims 1-3 and 12-15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Park in view of Andrew et al. (Andrew), U.S. Patent App. Pub. No. 2002/0131084. This rejection is respectfully traversed.

By way of review, Andrew is directed towards storing coded image data in storage of fixed memory size whereby during the storage of coded partitions, if it is decided that the buffer is full, a coded least perceptually partition currently stored in the buffer is overwritten by data from a coded more perceptually significant partition. Andrew discusses that the decoder of Andrew, decodes images in substantially raster scan order, commensurate with the usual decoding order of baseline JPEG. See Andrew, para. [0080].

Claims 1 and 12 at least recite features similar to claim 6, discussed above, in differing scope and breadth. Andrew has not been shown to cure these deficiencies. Therefore, for at least the reasons set forth above regarding claim 6, Applicants respectfully submit that claims 1 and 12 patentably distinguish over Park and Andrew, whether considered alone or in combination.

As set forth above, Applicants originally set forth arguments traversing the rejection in reliance upon Andrew, in the Amendment filed July 7, 2009. However, the outstanding Office Action has not provided a response to these arguments, yet has reissued the same rejection rationale in reliance upon Andrew. For the convenience of the Examiner, these remarks have been again, set forth below. A response to Applicants remarks is requested.

Further claim 1 at least recites:

by obtaining a scalar value corresponding to the symbol formed with K-bit binary data, and performing Huffman-coding by referring to the K-bit binary data, the obtained scalar value, and a scalar value corresponding to a symbol higher than a current symbol on the bit plane

The Office Action states that Park does not discuss these features, and relies upon Andrew in para. [0080] as curing this deficiency. Specifically, the Office Action appears to be interpreting the necessary information of Andrew as being equal to the claimed "scalar value corresponding to a symbol higher than a current symbol on the bit plane." However, here, Andrew discusses that necessary information comes from a higher bit plane (entirely different bit plane). In contrast, claim 1 recites "a scalar value corresponding to a symbol higher than a current symbol on the bit plane," that is, that both the claimed "symbol higher than a current symbol", and the claimed "current symbol" are on the same bit plane.

Therefore, as Andrew discusses obtaining necessary information from entirely different bit planes then a current bit plane, Applicants submit that Andrew fails to cure the deficiencies of Park, and fails to describe or suggest the claimed "obtaining a scalar value corresponding to the symbol formed with K-bit binary data, and performing Huffman-coding by referring to the K-bit binary data, the obtained scalar value, and a scalar value corresponding to a symbol higher than a current symbol on the bit plane."

In addition, independent claims 1, 12, 18, and 19 further define the claimed scale band information and coding band information, respectively as a scale factor for each of a plurality of scale frequency bands and a coding model for a plurality of coding frequency bands. Neither of Park or Andrew disclose or suggest such particularly claimed scale band and coding band information.

Thus, in view of the above remarks, Applicants submit that claim 1 patentably distinguishes over Park and Andrew, whether considered alone or in combination. Therefore, Applicants respectfully submit that claim 1, and claims 2-3 which depend therefrom and recite patentably distinct features of their own, patentably distinguish over the cited art.

Claim 12 at least recites features similar to claim 1 in varying scope and breadth. Therefore, for at least the reasons set forth above regarding claim 1, Applicants submit that claim 12, and claims 13-15 which depend therefrom and recite patentably distinct features of their own, patentably distinguish over the cited art.

Further, claim 2 at least recites:

obtaining a bit range allowed in each of the plurality of layers, wherein in the coding of the obtained plurality of quantized samples, the number of coded bits is counted, and if the number of counted bits exceeds a bit range corresponding to the bits, coding is stopped, and if the number of counted bits is less than the bit range corresponding to the bits even after quantized samples are all coded, bits that remain not coded after coding in a lower layer is finished are coded to the extent that the bit range permits

Therefore, claim 2 at least requires that the number of coded bits is counted in the coding of the quantized samples, and that if the number of counted bits exceeds a bit range corresponding to the bits, coding is stopped.

The Office Action cites to col. 3, lines 18-35, steps (b) and (c) of Park, which states "(b) coding the quantized data corresponding to the base layer within a predetermined layer size; (c) coding the quantized data corresponding to the next enhancement layer of the coded base layer and the remaining quantized data uncoded and belonging to the enhancement layer, within a

predetermined layer size." However, in this passage, it has not been shown that Park discusses or suggests "wherein in the coding of the obtained plurality of quantized samples, the number of coded bits is counted, and if the number of counted bits exceeds a bit range corresponding to the bits, coding is stopped."

Rather, Park appears to discuss "if quantization bits of a certain band are less than those of the band being currently coded, coding is not performed." Therefore, Park does not appear to be discussing the counting the bits of currently coded samples, but rather, comparing bits of bands, that is, bits of a certain band, and bits of the band being currently coded.

Therefore, Applicants respectfully submit that Park fails to discuss or suggest the features of claim 2, and that Andrew fails to cure this deficiency. Claim 12 at least recites features similar to claim 2 in differing scope and breadth. Accordingly, it is respectfully submitted that neither Park nor Andrew, whether considered alone or in combination, discuss or suggest the features of claims 2 or 12.

Withdrawal of this rejection and allowance of all pending claims is respectfully requested.

CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

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By: 

Stephen T. Boughner
Registration No. 45,317

1201 New York Avenue, N.W., 7th Floor
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501